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The Economic Outlook

he Congressional Budget Office forecasts that in 2005 and 2006, the U.S. economy will continue to expand at a healthy pace. Although investment by businesses is not expected to grow as rapidly as it did in 2004, such spending will probably still lead the economy's continuing expansion. Moreover, the caution that has characterized firms' decisionmaking over the past three years appears to be dissipating, and businesses seem to be having greater difficulty meeting increases in demand with their current workforce. As a result, hiring should accelerate. Productivity growth, which has been exceptionally strong since 2001, is expected to slow relative to its rate in the recent past; nevertheless, CBO anticipates that such growth will continue at a pace that is similar to its longrun average. Over the 2005-2015 period, real (inflationadjusted) gross domestic product is expected to expand at an average annual rate of 3.1 percent.

A variety of factors, however, could lead to growth over the next 10 years that differs from CBO's best estimate. Cyclical factors—those deriving from the business cycle—are one potential source of risk to the outcomes that CBO envisions. Others include the confidence of businesses and investors, the growth of foreign economies, and the level of stock prices, each of which could be more or less buoyant than CBO expects. Beyond those risks, the accuracy of CBO's forecast of conditions over the next two years is subject to the uncertainty that surrounds the economy's response to world energy prices, the war on terrorism, the exchange value of the dollar, and events elsewhere in the world.

Looking to the medium term (from 2007 to 2015), productivity could continue to grow rapidly, permitting greater growth of output, income, and profits. Alternatively, productivity could grow at a below-average rate over the next few years, reversing its extraordinary recent advances and resulting in a lower level of GDP and income than CBO now anticipates.

Overview of CBO's Two-Year Forecast

The economy is in the midst of a business-cycle expansion with solid gains expected in output, employment, and income. Growth of real GDP was an estimated 3.9 percent in 2004 (measured on a fourth-quarter-over-fourth-quarter basis), slightly slower than the 4.4 percent rate posted in 2003. But businesses appear to have thrown off some of the caution that marked the recovery from the 2001 recession and the subsequent expansion, and in the latter part of 2004, the growth of employment in particular picked up noticeably. In addition, investment by businesses swelled, rising from its 9 percent annual rate of increase in 2003 to a pace of nearly 12 percent in 2004. Those trends portend further growth during the near-term forecast period.

Although real GDP during the past two years grew at a rate faster than its historical trend, a considerable amount of "slack," or excess capacity, remained in the economy at the end of 2004, leaving room for further growth without increasing inflationary pressures. Thus, CBO expects that during the forecast period, GDP will grow faster than potential GDP, rising at a rate of about 3.8 percent, on average, before slowing during the 2007-2015 period to a pace of 2.9 percent (see Table 2-1). In that projection, the gap that exists between GDP and CBO's estimate of potential GDP is largely closed by the end of 2007. CBO does not attempt to predict the course of the business cycle beyond the two-year forecast horizon. Consequently, once that output gap has closed, GDP is projected to grow at the same rate as potential GDP.

As the gap between GDP and potential GDP is eliminated, the rate of unemployment will decline from

^{1.} Potential GDP is an estimate of GDP that excludes business-cycle fluctuations. It is the level of real GDP that corresponds to a high rate of resource (labor and capital) use.

Table 2-1.

CBO's Economic Projections for Calendar Years 2004 to 2015

	Estimated	Forecast		Projected Annual Average		
	2004	2005	2006	2007 to 2010 ^a	2011 to 2015 ^b	
Nominal GDP (Billions of dollars)	11,730	12,396	13,059	15,940	19,861	
Nominal GDP (Percentage change)	6.6	5.7	5.3	5.1	4.5	
Real GDP (Percentage change)	4.4	3.8	3.7	3.3	2.7	
GDP Price Index (Percentage change)	2.1	1.8	1.5	1.8	1.8	
Consumer Price Index ^c (Percentage change)	2.7	2.4	1.9	2.2	2.2	
Unemployment Rate (Percent)	5.5	5.2	5.2	5.2	5.2	
Three-Month Treasury Bill Rate (Percent)	1.4	2.8	4.0	4.6	4.6	
Ten-Year Treasury Note Rate (Percent)	4.3	4.8	5.4	5.5	5.5	
Tax Bases (Percentage of GDP)						
Corporate book profits	8.4	10.7	9.4	8.7	8.3	
Wages and salaries	45.6	45.7	45.8	45.9	45.9	
Tax Bases (Billions of dollars)						
Corporate book profits	984	1,331	1,222	1,349	1,635	
Wages and salaries	5,346	5,665	5,979	7,317	9,096	

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

Notes: Percentage changes are year over year.

Year-by-year economic projections for calendar years 2005 through 2015 appear in Appendix E.

- a. For projections in billions of dollars, the level is that in 2010.
- b. For projections in billions of dollars, the level is that in 2015.
- c. The consumer price index for all urban consumers.

5.4 percent at the end of 2004 to 5.2 percent in 2005 and 2006, CBO forecasts. During the 2007-2015 period, the rate of unemployment is expected to average 5.2 percent.

According to CBO's forecast, inflation will be lower in 2005 and 2006 than it was in 2004. A surge in energy prices, along with an acceleration in the cost of shelter and in used car prices, caused a spike in inflation in 2004 as measured by the consumer price index for all urban consumers (CPI-U); CBO, however, does not expect that increase to feed into core inflation (inflation excluding changes in prices for food and energy). In fact, energy prices are likely to fall this year, according to many analysts. CBO projects that consumer prices will rise by 2.4 percent in 2005 and 1.9 percent in 2006; during the 2007-2015 period, CBO anticipates growth averaging 2.2 percent.

Interest rates are expected to move upward during the next two years, as the economy continues to grow and the Federal Reserve continues to move toward a more neutral monetary policy. CBO forecasts that the three-month Treasury bill rate will rise to about 2.8 percent in 2005 and 4 percent in 2006; thereafter, it is projected to average 4.6 percent, which is relatively low by historical standards. The estimated rise in the 10-year Treasury note's rate is somewhat smaller. That rate is projected to average 4.8 percent in 2005 and 5.4 percent in 2006 and then inch up to average 5.5 percent from 2007 to 2015.

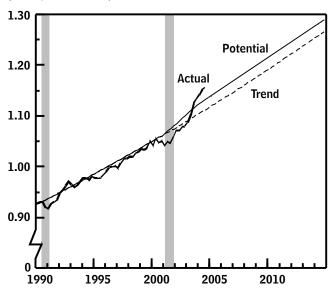
The Importance of Productivity Growth for Economic and Budget Projections

Productivity has grown at an extraordinarily rapid pace in the past three years. Labor productivity, or output per

Figure 2-1.

Total Factor Productivity

(Index, 1996 = 1.0)



Source: Congressional Budget Office

Notes: Total factor productivity is the average real output per unit of combined labor and capital inputs.

The data are adjusted to exclude the effects of methodological changes in the measurement of prices.

hour worked, rose at an average annual rate of 4.4 percent during the three-year period ending in the third quarter of 2004, well above its post-World War II average of 2.3 percent. Similarly, total factor productivity (TFP), or output per unit of labor and capital combined, grew at an average annual rate of 3.5 percent during the same period—which is about 2.2 percentage points above its trend rate of growth (see Figure 2-1).

The future course of productivity plays an important role in CBO's economic outlook, largely because it underlies CBO's estimate of the potential output of the economy. That estimate is important in two ways: it indicates how long the current relatively rapid growth of GDP can continue without running into capacity constraints, and it drives CBO's projections of GDP and tax bases over the next 10 years. Indeed, each increase of a tenth of a percentage point in the growth rate for labor productivity or TFP, if cumulated over that period, would raise the level of GDP in 2015 by roughly 1 percent, or about \$200 billion.

Rapid productivity growth also has implications for the outlook for near-term inflation and employment through

its effect on the output gap and excess capacity. The output gap (the percentage difference between GDP and potential GDP) is a summary indicator of the slack that exists in the economy. Strong productivity growth since 2001 has boosted CBO's estimate of potential output, which has, in turn, prevented the moderate growth of real GDP from shrinking the output gap by as much as might have been expected on the basis of historical patterns. Hence, a fair amount of slack—1.6 percent—still existed during 2004, which has kept inflation tame and allowed the Federal Reserve to keep interest rates lower than would otherwise have been the case.

Fast growth of productivity also explains how solid growth of output has been possible even though the rise in employment during the current business-cycle expansion has been unusually small. After declining modestly during the recession, real GDP has grown since 2001 at an average annual rate of 3.3 percent, a fairly typical pace in past business cycles. Apparently, however, firms were reluctant to hire workers (and purchase structures and equipment) during that period and focused instead on increasing efficiency. As a result, businesses have been able to meet modest increases in demand with existing labor and capital, and productivity growth has surged.

Going forward, it is difficult to project confidently whether the faster pace of productivity growth will continue because analysts have no compelling explanation for the acceleration. A number of hypotheses have been suggested to explain the speedup in growth; they include the possibility that businesses might have hesitated to hire more workers, perhaps because of geopolitical uncertainties arising from the threat of terrorism or because of strong competition from abroad, and focused instead on improving productivity. Other possibilities center on the idea that the surge in productivity is a delayed payoff to the investments that firms made in information technologies (IT) and other capital goods during the late 1990s. (Analysts suggest that the delay might have ensued either because there were unmeasured costs for absorbing new capital goods or because IT investments are fundamentally—but gradually—transforming the way that the economy works.) To decisively accept or reject any such conjecture is impossible, given the limited amount of data available from such a brief period of observation.²

^{2.} For more discussion of the speedup in productivity growth, including possible causes, see Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2005-2014* (January 2004).

In CBO's view, three broad outcomes are possible:

- The productivity surge might be reversed. In that scenario, a period of below-trend (or negative) growth would ensue, bringing the level of productivity back to the path it had been following before the period of faster growth. (That is what happened after surges in productivity in 1983 and 1992.)
- The gains thus far might persist as an upward shift in the future path of productivity, but productivity growth would return to its previous pace. The faster growth from the recent period would not be reversed, but going forward, productivity would "jump off" from the new higher level.
- Future rates of productivity growth might continue to exceed CBO's previous estimate of growth based on productivity's historical trend. In that case, productivity levels in future years would exceed CBO's previous projection by an ever-widening margin. Roughly speaking, that scenario mirrors what happened between the early 1970s and the mid-1990s but moves in the opposite direction. (Starting in about 1973, productivity growth slipped from the 2.8 percent average pace it had posted during the 1950s and 1960s and grew at an average annual rate of 1.4 percent until about 1995.)

Also possible, of course, is that productivity growth during the period since 2001 will look entirely different after the underlying data have been revised in the future—a common occurrence as more information becomes available. Growth could be revised upward or, as happened with the data for the late 1990s, downward (see Box 2-1).

CBO has chosen to adopt the middle ground—that the recent upturn in productivity growth reflects a transition to a permanently higher level of productivity in the economy. As a result, CBO has raised its estimate of the growth of potential TFP during the 2001-2003 period by an average annual rate of 0.6 percentage points. That adjustment to potential TFP growth accounts for about half of the deviation during 2004 of actual TFP from CBO's estimate of the trend level.³ In the future, TFP growth is assumed to revert to the slower pre-2001 rate, leaving the level of potential TFP permanently higher than it would

have been had its growth not accelerated during the 2001-2003 period.

The Outlook for 2005 and 2006

CBO forecasts that during 2005 and 2006, the economy will continue to expand at a healthy pace. Businesses are expected to respond to stronger demand by increasing their spending on capital assets and by hiring more workers, which should in turn support further boosts in demand. Productivity growth over the same period is likely to abate somewhat and interest rates to climb gradually, while inflation will moderate, in CBO's estimation, after the spike in 2004 induced in part by the jump in energy prices.

The Business Sector

The business sector comprises firms that produce goods and services. Firms decide which workers (and how many of them) to hire, how much investment in capital goods to undertake, whether to pursue sales in other countries, and how to most efficiently combine their labor and capital to maximize their profits. Of those decisions, investment spending—firms' expenditures on equipment, software, structures, and inventories—has the most direct effect on the growth of output. Although such investment makes up a relatively small share of GDP—roughly 11 percent in recent years—it is quite volatile and therefore disproportionately affects changes in GDP growth.

Higher levels of investment by businesses will be an important source of growth during the next two years, in CBO's estimation. Firms will probably be unable to meet increases in demand by cutting costs and increasing efficiency. Instead, they are expected to expand capacity by purchasing capital assets and hiring more workers.

Business Fixed Investment. After a prolonged decline between the end of 2000 and the beginning of 2003, businesses' spending on structures and equipment grew robustly during the final three quarters of 2003 and in 2004 and should continue to contribute strongly to economic growth as the expansion continues. During the second half of 2004, real business fixed investment

CBO began including this adjustment in January 2004. For more details, see Congressional Budget Office, The Budget and Economic Outlook: Fiscal Years 2005 to 2014.

Box 2-1.

Data Revisions and the Productivity Boom of the Late 1990s

During the late 1990s, economic growth in the United States was robust, the stock market was booming, investment by businesses surged, and the rise in productivity appeared to be so strong that many observers declared that a new era of productivity growth had dawned. Since 2000, a number of revisions to the data used to calculate productivity have changed the view of its growth during the late 1990s—in particular, by trimming the pace of productivity expansion during the 1995-1999 period.

For example, when CBO estimates total factor productivity (TFP) during that period on the basis of currently available data, TFP grows at an average annual rate of 1.3 percent. However, when CBO calculates TFP using data that were available when it prepared its *Budget and Economic Outlook* for January 2000, the rate is 1.7 percent. Pushing the estimate lower have been revisions to the three data series that are used to compute TFP: specifically, growth in the number of hours worked and in capital services (the productive services provided by the economy's capital stock) has been revised upward, and growth of real GDP has been revised downward (see the figure).

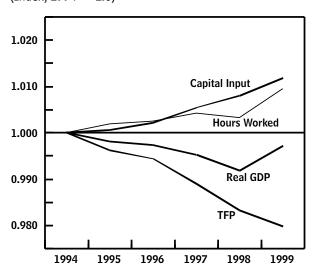
Those revisions were made gradually, none was especially large, and the cumulative effect of all of the revisions was to lower the level of TFP by 2 percent in 1999. The biggest revision to real GDP occurred between the publication of CBO's January 2001 and January 2002 Budget and Economic Outlook reports, when the Bureau of Economic Analysis released the results of its annual revision to the national income and product accounts. That revision reduced the average annual rate of growth of real GDP in the nonfarm business sector during the 1995-1999 period by nearly a tenth of a percentage point. The largest upward revision to the category of labor hours worked in the economy occurred last August—too late to be incorporated in CBO's economic forecast for the September update of its January 2004 outlook. The Bureau of Labor Statistics released a data series that reflected new estimates of hours worked by nonproduction and supervisory workers and boosted the pace of labor-hour

growth during the 1995-1999 period by more than a tenth of a percentage point.

Although the revisions to the data underlying the productivity statistics are significant, there is still a substantial step-up in growth for TFP during the late 1990s when compared with the preceding period. The growth rate calculated for TFP during the 1995-1999 period—1.3 percent—is considerably higher than the average growth rate for the 1974-1994 period, when TFP grew at an average annual pace of 0.8 percent. The revisions to hours worked and real GDP described above also affect labor productivity. When calculated using data that were available in January 2000, labor productivity grows at an average annual rate of 2 percent during the 1995-1999 period, down from 2.2 percent using currently available data. Like TFP, labor productivity growth picks up during the late 1990s, even after the revisions: average annual growth during the 1995-1999 period is about 0.6 percentage points faster than it was from 1974 to 1994.

Revisions to Late 1990s Data for Key Inputs to Potential Output

(Index, 1994 = 1.0)

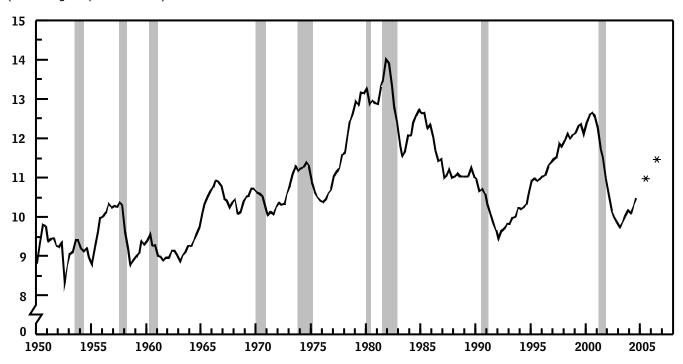


Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics.

Figure 2-2.

Business Fixed Investment

(Percentage of potential GDP)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Note: * = CBO's forecast for 2005 and 2006.

climbed at an estimated rate of more than 15 percent measured on an annual basis—well above its postwar average of 5 percent or its average annual rate of 9 percent during the boom in investment of the late 1990s. Yet despite that vigorous growth, real business fixed investment at the end of 2004 had only just regained the ground it had lost during the 2001 recession and the sluggish recovery that followed. Consequently, CBO expects that during the next two years, the pace of firms' investment spending will remain above its long-run rate.

Real business fixed investment fell by 15.1 percent between the beginning of the recession (in the first quarter of 2001) and the first quarter of 2003. As a share of potential GDP, that drop was sharper and more long-lasting than such declines in past business cycles (see Figure 2-2). In the first quarter of 2003, eight quarters after the business cycle's peak, real investment in equipment, software, and structures was still 14 percent below its peak value. On the basis of past patterns, it would have been expected by then to have recovered all of its losses.

As the economy recovered from the 2001 recession, however, demand for goods and services expanded less rapidly than businesses' ability to produce them. The reason, for the most part, was that the growth rate of total factor productivity was exceptionally high, which allowed firms to meet increased demand without the hiring or capital expenditures that would be typical during the early phase of a business-cycle expansion. In addition, a surge in investment spending during the late 1990s, especially for telecommunications equipment, apparently left many industries with more capacity than they needed. Consequently, even though real GDP grew at moderate rates in 2002 and 2003, firms' spending for capital equipment and the growth of employment lagged behind the rise in output.

Both investment and hiring improved in 2004, indicating that the factors tending to restrain firms' spending had weakened. Real business fixed investment grew by an estimated 11 percent last year, suggesting that businesses were concerned about their ability to meet expected increases in demand with existing capacity and expected productivity growth. Although labor productivity rose at

a fairly brisk pace in 2004—about 3 percent—CBO expects that labor productivity growth will slow toward its long-term trend in 2005 and 2006. At the same time, a steady rise in consumption by households and governments will encourage businesses to spend more on investment, which CBO estimates will grow by about 10 percent in real terms during 2005 and 2006.

A variety of indicators other than business investment suggest that the confidence of businesses improved during 2004. For example, the Business Roundtable, an association of chief executive officers of leading U.S. corporations, surveyed up to 160 member companies about the economic prospects for the next six months and reported an overall index averaging 98 in 2004 (a value above 50 indicates expansionary conditions) compared with a value of 68 in 2003. In a key portion of the survey that measures confidence, an average of 88 percent of respondents to the association's four quarterly surveys of 2004 expected their firm to increase sales in the next six months—compared with 72 percent during 2003.

Another measure, based on work by the Conference Board, showed similar results but also some divergence. (The Conference Board is a global business membership organization that conducts research and forecasts and assesses economic trends.) The measure, which used the board's CEO Confidence Survey, was also stronger in 2004 than in 2003, averaging 67 last year versus 62 in the previous year. Unlike the Business Roundtable's survey, however, the Conference Board's measure suggests that confidence waned over the course of 2004 after a robust first quarter.

Changes in tax laws aided investment in 2004 but will no longer do so in 2005 and beyond. The Job Creation and Worker Assistance Act of 2002 (JCWAA) contained incentives to bolster businesses' spending on equipment and structures by temporarily increasing the fraction of new investment that firms could "expense" (deduct from their taxable income immediately rather than over time). The Jobs and Growth Tax Relief Reconciliation Act of 2003 expanded those incentives by allowing firms, through the end of 2004, to expense 50 percent of the value of new equipment and of some structures in the tax year in which the property was acquired. JGTRRA also increased, through 2005, the limit on small businesses' expensing of new depreciable assets—and that limit was extended through 2007 by the American Jobs Creation Act of 2004. On balance, those incentives boosted investment in equipment slightly in 2004 but will have little effect in 2005 and 2006.

Current financial conditions are favorable for businesses that seek to invest. Firms' high levels of corporate profits and retained earnings (the portion of profits that is not paid to shareholders as dividends) since the recession's end in 2001 should help businesses finance their capital spending from internal funds. Aided in part by the accelerated expensing provided by JCWAA and JGTRRA, firms' retained earnings reached an estimated 4 percent of potential GDP during 2004, a share not matched since the 1960s (see Figure 2-3). Corporate profits and retained earnings are not expected to remain at such elevated levels, though—partly because almost all of the expensing provisions in JGTRRA expired at the end of 2004 and partly because employers are expected to increase their contributions to their defined-benefit pension plans, especially in 2006 (see Appendix D).

In the near term, firms will continue to use retained earnings to underpin their investment spending. And if they need to turn to outside sources of financing, they will find that their costs for securing external capital will not have increased dramatically. Short-term interest rates rose somewhat during the second half of 2004, but businesses' spending on structures and equipment responds more to changes in long-term than in short-term rates, and long-term rates changed little over the year. Moreover, gains in the stock market last year mean that equity financing has become cheaper than it was in 2002 and 2003.

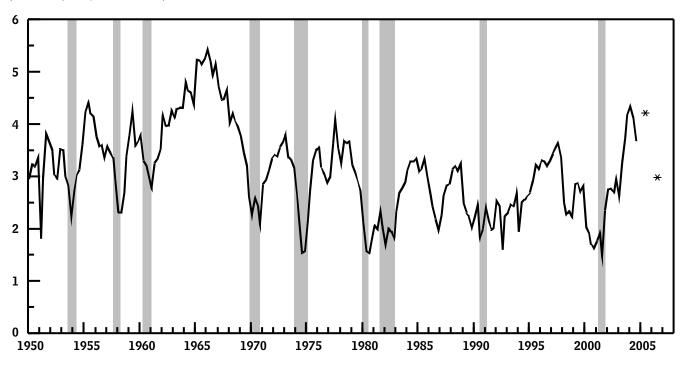
CBO expects that solid growth in the demand for output, combined with healthy financial conditions, will allow businesses' investment spending to continue to grow at a relatively fast pace during 2005 and 2006. In CBO's forecast, real investment in producers' durable equipment and software grows at an average annual rate of 10 percent during 2005 and 2006, whereas firms' spending for nonresidential structures, which began to rise in 2004, is slated to grow at an average annual rate of 4 percent during the two-year forecast period.

Despite the signs that businesses appear ready to invest more, however, actual outcomes remain uncertain. If, for example, the rate of growth of productivity continues to exceed its potential rate, firms could decide to meet future increases in demand with existing capacity and thus would not need to boost investment by as much as CBO

Figure 2-3.

Corporate Retained Earnings

(Percentage of potential GDP)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Notes: Retained earnings are the portion of profits not paid to shareholders as dividends.

* = CBO's forecast for 2005 and 2006.

envisions. Alternatively, other components of demand could grow more or less vigorously than CBO has forecast, which would lead to a correspondingly stronger or weaker course for investment. Another possibility is that future innovations may require firms to make new investments. (One example of such a change was the commercial development of the Internet, which required substantial investments by firms during the 1990s.) If such circumstances arise, investment spending by businesses may be much greater than CBO has foreseen.

Inventory Investment. The recent pattern of investment in inventories also suggests that businesses have become more confident about their economic prospects. As demand has picked up, so too has the building of inventories. Accumulation accelerated in 2004—inventories rose by an estimated \$40 billion—after a period of sluggishness in 2003, when firms drew down their stocks. As with fixed investment, the pickup in spending on inventories has lagged behind economic growth during the past three years. Now, though, the strong demand forecast for 2005

and 2006, combined with a fairly lean stock of inventories, is expected to propel inventory investment to about \$80 billion in 2005 and \$70 billion in 2006.

The Household Sector

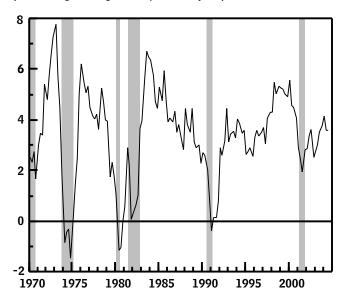
The household sector consists mainly of individuals and families who supply labor and decide how to divide their income between consumption and spending—and then choose which goods and services to purchase. Households' spending composes a large share of GDP—about 70 percent, on average, during the past five years. Households are also the main force behind residential investment, which makes up another 5 percent of GDP.

Spending by the household sector was a bright spot during the 2001 recession and subsequent recovery, supporting overall growth when other sectors, such as business investment and net exports, did not. Real consumer spending, for example, slowed but did not decline during the recession: it grew at an estimated average annual rate

Figure 2-4.

Real Personal Consumption Expenditures

(Percentage change from previous year)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

of 3.3 percent during the 2002-2004 period, which is not too different from its long-run average rate of 3.6 percent (see Figure 2-4). Real housing investment was also relatively robust in the past recession, as compared with previous downturns, and remained quite strong during the recovery. Policy actions contributed to those healthy outcomes, as the Federal Reserve's accommodative monetary policy lowered financing costs for housing and durable goods and expansionary fiscal policy cut personal taxes. Last year, real consumer spending grew by an estimated 3.6 percent (measured on a fourth-quarter-over-fourth-quarter basis), and real residential investment grew at a solid 5.5 percent rate.

CBO believes that the household sector will continue to support the growth of real GDP in the next two years. The fundamental elements for an ongoing rise in consumer spending are in place: households' net worth has continued to improve; the recent gains seen in employment and income are likely to continue; and the household sector as a whole faces few financial difficulties. Nevertheless, an expected upturn in interest rates is likely to slow the growth of real consumer spending a bit this year and cause a modest decline in real residential investment.

The main risk to the prospect of continued robust spending by households is a stalling of employment and hence of growth in incomes. Another risk is the possibility of a sharp decline in the prices of houses, which are at a high level relative to incomes (and the general price level). However, a broad-based decline in housing prices seems unlikely.

Employment. CBO expects that conditions in the labor market will continue to improve as the economy expands in 2005 and 2006. Growth of the labor force is likely to accelerate, in CBO's view, and hiring to expand at an even faster rate, because firms will be unable to meet expected increases in demand through productivity growth. But the growth of employment is likely to remain slower than it would typically be in an expansion, and CBO forecasts that the unemployment rate will fall only slightly—to 5.2 percent—in 2005.

The level of employment dipped from the end of the 2001 recession until mid-2003, when it bottomed out and began a rebound that continued in 2004. Businesses added more than 2.1 million jobs last year, as measured by the Bureau of Labor Statistics' (BLS's) payroll survey, boosting employment by 1.6 percent over the four quarters of 2004. Employment as measured by BLS's household survey presents a slightly more optimistic picture of the labor market. According to the household survey, employment started growing earlier than the payroll measure indicated, and it increased steadily over the past two years, climbing by 1.0 million jobs in 2003 and about 2.2 million in 2004.⁴

The stronger gains in employment last year are reflected in the drop in the unemployment rate, which declined by 0.5 percentage points to 5.4 percent. Ordinarily, that low a rate would suggest that the labor market had tightened appreciably. However, the rate probably understates the market's current degree of slack because the rate of labor force participation—the share of the population ages 16 and older who are either employed or looking for work—has been falling since 2000. After a long-running rise that started in the early 1960s, the labor force participation rate peaked at 67 percent of the civilian population in the first quarter of 2000 and has since declined to 66 percent. That drop implies that the labor force has 2.2 million

^{4.} Those figures were adjusted by BLS to smooth out the effects of revisions to the underlying population estimates in January 2003 and January 2004.

fewer workers than it would have had if the participation rate had not declined. CBO anticipates that in the coming years, the participation rate will recover somewhat as the continuing creation of jobs draws many of those workers back into the labor force.

Some indicators of businesses' plans for hiring suggest that firms are likely to continue to add jobs at a rate similar to the average since 1970. An index of hiring demand calculated by the Internet-based employment agency Monster.com, although too new to interpret with any precision, indicates that the availability of jobs is greater than it was a year ago. Moreover, the BLS's Job Openings and Labor Turnover Survey shows recent gains in both the rate of hiring and the number of job openings. In addition, a recent survey of employers' hiring plans by Manpower, Incorporated, a provider of temporary workers, suggests that hiring gains will continue in early 2005.

Income. CBO expects that more substantial growth in employment will provide—as it did last year—the basis for a solid rise in wages and salaries in 2005 and 2006 (see Figure 2-5). In 2004, real wages and salaries grew by an estimated 2.6 percent after inching up 0.6 percent in 2003; the pace of growth this year is expected to pick up to about 4 percent before tapering off slightly next year. Also boosting real incomes slightly this year, in CBO's view, is a modest decline in energy prices, which will lower the overall rate of inflation in consumer prices.

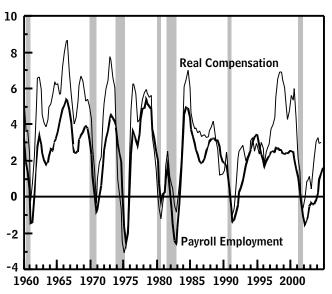
Although the growth of wages and salaries is expected to quicken in 2005, the growth of disposable (after-tax) personal income is likely to remain relatively steady. During the past few years, cuts in personal taxes raised disposable income, even though the growth of wages and salaries was fairly listless. By contrast, the source of growth in disposable income in the future is likely to be a moderate rise in employment growth.

In CBO's estimation, a modest decline in energy prices will boost real disposable personal income this year by a small amount. Increases in the price of both crude oil and natural gas contributed to the hike in consumer energy prices last year, which reduced the rate of growth of real disposable income. After rising only slightly in the second half of 2003, the price index for consumer energy products shot up at an average annual rate of more than 26 percent in the first half of 2004; in the third quarter, it climbed by an additional 4 percent. This year, CBO

Figure 2-5.

Payroll Employment and Real Labor Compensation

(Percentage change from previous year)



Sources: Congressional Budget Office; Department of Commerce,
Bureau of Economic Analysis; Department of Labor,
Bureau of Labor Statistics.

assumes, refiners' acquisition cost of crude oil will fall from about \$45 per barrel in the fourth quarter of 2004 to just under \$40 by the fourth quarter of 2005.

Households' Financial Health. Households' finances are in good shape, having turned around in 2003 and strengthened in 2004. Consequently, they should not hinder spending. Despite a flat stock market for most of the year, the net wealth of households essentially rose at the same rate as disposable income during 2004 because their real estate wealth posted a strong advance. Moreover, the household sector as a whole does not appear to be suffering from financial stress. Although households' borrowing grew rapidly last year, the share of disposable income they used to service debts rose only slightly, and the share claimed by financial obligations declined through the third quarter of last year. In addition, delinquency rates at commercial banks on credit cards, other consumer loans, and residential real estate all declined during 2004.

Housing. Investment in housing, propelled by historically low interest rates on home mortgages, has been an important source of strength in the economy in the past few

years. Now, however, in CBO's view, the housing market is likely to cool in 2005 and 2006 in the face of a rise in mortgage interest rates. During 2004, housing investment surged to near-record levels, reaching 5.7 percent of GDP in the middle of the year; single-family housing starts and sales of new and existing homes also reached record highs. But mortgage interest rates are likely to rise as the economy keeps expanding and the Federal Reserve continues to push the federal funds interest rate, its main policy tool, back toward a more neutral level. ⁵

The prices of houses registered another strong advance last year. According to the Office of Federal Housing Enterprise Oversight (OFHEO), the price index for singlefamily homes rose by 13 percent in the year ending in the third quarter of 2004, a jump that is considerably above the average annual rise of about 7 percent posted during the previous two years. According to OFHEO, a part of the step-up in growth last year may reflect the fact that appraised values for houses that were undergoing refinancing have "caught up" with previous price increases in the real estate market. Apparently, appraisals for refinancings may not have kept pace with market prices during the previous one or two years, when refinancing activity was at record levels. Now that such activity has abated, appraisals for refinancings better reflect current market prices, in OFHEO's view.

Some analysts worry that the continued rise in the prices of houses reflects a market that has been seized by a speculative frenzy that could lead to a price collapse. Such an outcome would hurt household wealth and hence spending. Research indicates, however, that the rise in housing prices in recent years for the nation as a whole reflects positive fundamental factors, such as rising personal income and declines in mortgage interest rates, rather than speculative expectations of future increases in prices. In CBO's estimation, a general collapse of prices for houses is unlikely because stronger income growth in the next two years will probably counteract the anticipated rise in mortgage interest rates. Prices could fall in some areas—

particularly parts of the Middle Atlantic, New England, and Pacific regions—where prices have risen much faster than in other parts of the country. However, any such declines are unlikely to present a serious risk for the nation as a whole.

Imports, Exports, and the Value of the Dollar

In 2004, the United States increased its imports by more than it increased its exports, so the nominal balance of trade—U.S. exports minus imports—worsened. During the past three years, that imbalance has widened by an estimated \$230 billion in nominal terms, or about 2 percent as a share of GDP. However, in CBO's estimation, the decline will reverse in the near future. By 2006, the growth of exports is likely to outpace that of imports, and the balance of trade should begin to improve.

The projected improving trend in the trade balance largely reflects the expected decline of the dollar relative to the currencies of the United States' trading partners, especially those of Asian economies. The dollar has been falling for three years; since its peak in the first quarter of 2002, it has lost almost 14 percent of its value (see Figure 2-6). Such a decline should eventually improve the trade balance by making U.S. exports cheaper (in terms of foreign currency) and U.S. imports more expensive (in dollars). Nevertheless, the trade balance has continued to fall over the past three years despite the dollar's decline, for two reasons.

First, declines in the exchange value of the dollar typically take two to three years to exert their full effect on the trade balance. Initially, the dollar's decline will worsen the nominal trade balance because it raises the dollar price of imports, most of which are priced in foreign currencies, faster than it reduces the quantity of imports. Over time, however, the trade balance will improve as the increase in the value of exports and the decline in the quantity of imports dominate the rise in the price of imports. Thus, the lack of response of the trade balance to the dollar's decline since early 2002 partly reflects a continued adjustment to the rapid rise in the dollar's value during the 1995-2001 period.

Second, the fall of the U.S. currency has increased the dollar prices of imported goods by less than analysts had expected on the basis of past relationships. Although the dollar fell by about 14 percent during the past three years, import prices (other than for oil and computers) rose by

^{5.} The federal funds rate is the interest rate that financial institutions charge each other for overnight loans of their monetary reserves.

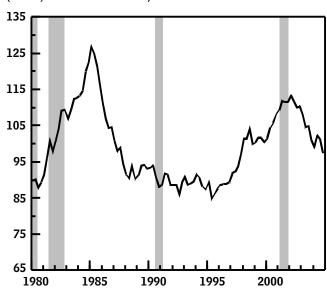
^{6.} See Office of Federal Housing Enterprise Oversight, "OFHEO House Price Index: House Price Gains Continue to Accelerate" (news release, December 1, 2004), available at www.ofheo.gov.

^{7.} Jonathan McCarthy and Richard W. Peach, "Are Home Prices the Next 'Bubble'?" *Economic Policy Review*, Federal Reserve Bank of New York (December 2004), pp. 1-17.

Figure 2-6.

Real Trade-Weighted Value of the U.S. Dollar

(Index, March 1973 = 100)



Sources: Congressional Budget Office; Federal Reserve Board.

Note: The real trade-weighted value of the U.S. dollar is a weighted average of the foreign exchange values of the dollar against the currencies of a large group of major U.S. trading partners. The index weights, which change over time, are derived from U.S. export shares and from U.S. and foreign import shares.

only 5 percent, which implies that producers abroad must have absorbed more of the effect of the exchange rate change than in the past. Presumably, the underlying reason is an increase in competition for the U.S. market. Over the past several years, the lackluster domestic demand in many industrialized nations suggests that the U.S. market has grown in importance for firms in other countries at the same time that the surge in U.S. productivity growth has boosted the competitiveness of U.S. products. Exporters in those industrialized countries may also be afraid that if they raise their dollar prices by too much, they will lose some of their share of the market to producers in the United States and to the Chinese, whose currency has not appreciated against the dollar.

Imports and exports also reflect other factors, notably the price of oil and the growth of incomes. (Income growth in the United States helps determine the demand for imports; income growth in countries that the United States trades with helps determine exports.) The sharp rise in oil

prices since late 2003 slowed the decline in the trade deficit by raising the value of U.S. oil imports. CBO expects that oil prices will continue to fall from their peak in late 2004, which will help reduce the cost of such imports. Another factor that has been contributing to the trade balance's decline—stronger growth in the United States than in the countries that purchase its exports—is expected to play less of a role in the next few years, as the difference between the pace of growth here and abroad diminishes.

CBO's forecast of an improving trade balance, however, is subject to considerable uncertainty. If the economies of the United States' trading partners should falter or oil prices fail to decline as expected, the improvement in the trade balance could be delayed. CBO's forecast also incorporates the assumption that international investors (including governments) will continue to increase their holdings of U.S. assets. If, instead, those investors decided to reduce or simply not increase their holdings of dollar assets, the U.S. currency could fall more quickly than CBO anticipates—which would tend to raise both inflation and interest rates, at least temporarily, and slow economic activity. It would also, however, improve the trade balance more quickly, implying that foreign countries would bear some of the costs of that adjustment.

Economic Conditions Abroad. Forecasters in the private sector anticipate that the overseas economic recovery will continue, with solid growth and generally low inflation and interest rates. Among the United States' trading partners, economic growth picked up in 2004; during 2005 and 2006, it is expected to nearly keep pace with its longrun rate of roughly 4 percent. Consensus Forecasts, a survey of financial and economic forecasters, expects that growth among the countries that use the euro will equal 1.7 percent in 2005 and 2 percent in 2006.8 Japan's economic recovery, which has been helped considerably by exports to China, should also continue. Canada, although fighting the drag caused by an appreciating currency, is also helped by high prices for commodities (including oil) and is expected to keep growing at a moderate rate.

Major developing countries have also grown at healthy rates. China, though it imports little from the United

^{8.} Consensus Economics, Inc., Consensus Forecasts, A Digest of International Forecasts, published by Consensus Economics, Inc., (London: U.K., Consensus Economics, Inc., January 10, 2005).

States, makes a substantial contribution to regional economic activity, having grown 9 percent in real terms during 2003 and 2004. In Latin America as well, economies have rebounded. Mexico's has benefited from rapid economic growth in the United States, its largest trading partner, and from the increase in the price of oil. Brazil's economy, the largest in South America, expanded at an estimated rate of 5 percent during 2004 and is expected to grow by nearly 4 percent in 2005.

The Current Account and the Exchange Value of the

Dollar. Although exchange rates are notoriously difficult to forecast, CBO expects that the exchange value of the dollar will decline during the next two years, largely because continued deficits in the nation's current account will raise net liabilities to foreigners to new highs. (The current account is a broad measure of U.S. transactions with the rest of the world. It includes not only the trade balance but also net investment income and net unilateral transfers.) In CBO's view, investors will be less willing to add to their holdings of dollar assets at current exchange rates and interest rates.

Persistent current-account deficits have led to more-rapid accumulation of foreign-owned assets in the United States than of U.S.-owned assets abroad. Net liabilities to foreigners—the difference between U.S.-owned assets abroad and foreign-owned assets in this country—declined to an estimated -24 percent of GDP during 2004. By the end of 2006, such liabilities will have fallen to about -30 percent of GDP, CBO expects, even though the current-account deficit is forecast to stabilize during that time.

Investors may not be willing to hold that increased volume of dollar assets unless the rate of return they expect on those assets goes up. In principle, the expected rate of return can increase either as the dollar return on those assets (interest rates or the return on equities) goes up or as the dollar falls, making the assets cheaper. CBO anticipates that most of the adjustment will come as the dollar falls.

Assessing the Risk of a Sharp Decline in the Dollar. The extent of the U.S. current-account deficit and of the

United States' net liabilities to foreigners has prompted concerns on the part of some analysts about the risk of a sudden and significant decline in the dollar. In that scenario, a sharp drop in the demand for assets denominated in dollars could cause an abrupt tumble in the dollar's value, which could disrupt the global economy by sharply raising inflation and interest rates in the United States, slashing the foreign-currency value of dollar-denominated assets that are owned by people in other countries, and crippling the competitiveness of foreign producers relative to manufacturers in the United States. More likely, however, in CBO's view, is an orderly decline in the dollar and little disruption to the U.S. economy, for the following reasons:

- The returns expected on investments in the United States remain higher than those available abroad, especially after adjusting for the risk of default. In part, that is because the outlook for the U.S. economy is brighter than the prospects for Japan and the countries that use the euro, which suggests that the return on U.S. portfolio assets, such as stocks and bonds, will exceed the return available in those countries. The expected rate of return on portfolio assets in some developing economies may surpass that in the United States, but it is also subject to much greater risk.
- Many countries that export to the United States have a strong incentive to minimize the potential damage to their own economies by preventing the dollar from falling too sharply. A large decline in the dollar's exchange rate would cut the value of many countries' reserves of foreign exchange—which are held largely in dollars—and it could also dampen the rate of economic growth in countries that send a large share of their exports to the United States. Moreover, as the major international reserve currency, the dollar's exchange value receives steady support from demand arising from its use as a medium of exchange for international transactions and from those who hold it as a precaution against the devaluation of their own currency.
- A plunge in the dollar's exchange rate would not tend to feed on itself as has sometimes occurred in past episodes involving depreciations of the currencies of developing countries. Most foreign assets owned by U.S. citizens, companies, and governments are denominated in the relevant local currency, whereas almost all U.S. liabilities to foreigners are denominated in dol-

Unilateral transfers are official and private payments from the United States to sources abroad and from sources abroad to the United States, in which the payments are not made in exchange for goods and services.

lars. Consequently, the dollar's depreciation automatically shrinks the value of U.S. net liabilities to foreigners, thereby removing some of the pressure for further depreciation. By contrast, many of the international liabilities of other countries, especially those of developing countries, are denominated in the currencies of their creditors. Hence, a decline in the exchange value of the countries' currencies increases the value of their net liabilities to foreigners—which, in turn, further depresses their currencies.

■ The depreciation of the dollar will, over time, help boost U.S. net exports and thus economic growth. That positive aspect of a drop in the dollar's value also helps limit the extent of its fall.

Monetary Policy and Financial Market Conditions

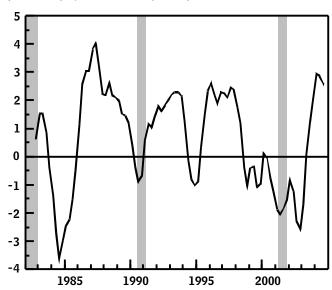
CBO expects that during the next two years, the Federal Reserve will continue to shift monetary policy away from the accommodative stance it has maintained since the 2001 recession and toward a more neutral position by raising its target for the federal funds rate, its primary policy instrument. Before the central bank began to boost the rate in June, it had been kept for a full year at the historically low level of 1 percent, a policy that was designed to achieve economic growth that could sustain itself without policy actions. Now that the economy appears to have found its footing, Federal Reserve officials have stated that they will raise the target rate at a measured pace and move monetary policy toward a neutral stance—one that is balanced between supporting economic growth and maintaining low inflation. That approach is seen by participants in the financial markets as allowing room for the Federal Reserve to quicken the pace of policy tightening if inflation surges or to delay interest rate increases if the economy stumbles. At the time that CBO's forecast was completed, the consensus among financial market participants was that the federal funds rate would reach 3.25 percent by August 2005. (In late December 2004, the target rate was 2.25 percent.)

An index of monetary and financial conditions compiled by the consulting firm Macroeconomic Advisers indicates that financial conditions are still adding a considerable degree of upward momentum to the growth of GDP, even after the hikes in short-term interest rates that occurred in 2004 (see Figure 2-7). At year's end, rates on corporate bonds, though slightly higher than the low levels (about 5.3 percent) seen briefly in early 2004, were still sufficiently low (about 5.5 percent) to encourage

Figure 2-7.

Index of Monetary and Financial Conditions

(Percentage points of GDP growth)



Sources: Congressional Budget Office; Macroeconomic Advisers, LLC.

Notes: This index estimates how much financial markets contribute to the rate of growth of real GDP. It draws on statistical relationships between real GDP and financial variables such as interest rates, exchange rates, and equity values. When the index is positive, overall conditions in the financial markets are conducive to the growth of real GDP. When it is negative, overall financial market conditions are a drag on growth.

The last data point is the third quarter of 2004.

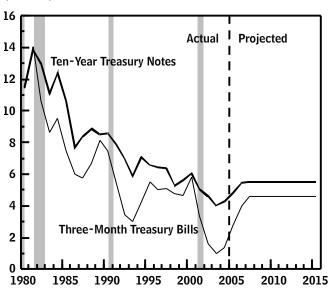
investment. Like other long-term rates, those on corporate bonds had weathered midyear jitters over whether the pace of the Federal Reserve's tightening would be rapid or relatively deliberate. (Rates rose to 6 percent before falling back.) Conditions have also continued to improve in the stock market, which is helping to restore household wealth. New public stock offerings by corporations have been one result of that more favorable climate, providing another source of funds for businesses' expansion.

CBO forecasts that the rate on three-month Treasury bills will continue to climb as the federal funds rate rises. The rate on three-month bills, which stood at 2.2 percent at the end of 2004, is expected to average 2.75 percent and 4 percent in 2005 and 2006, respectively (see Figure 2-8). That forecast is on a par with expectations in financial

Figure 2-8.

Interest Rates

(Percent)



Sources: Congressional Budget Office; Federal Reserve Board.

Note: All data are annual values.

markets about the direction of monetary policy. (Typically, the Treasury bill rate tends to rise and fall with the funds rate.)

The rate on 10-year Treasury notes also rises in CBO's forecast but to a lesser degree than the rate on short-term securities. To a certain extent, the near-term outlook for monetary policy affects day-to-day and month-to-month changes in rates on long-term financial instruments. The path of those rates, however, tends to be governed by the long-term outlook for inflation and the potential for real returns from capital investment. CBO thus forecasts that the rate on 10-year Treasury notes will average 4.8 percent and 5.4 percent in 2005 and 2006, respectively.

Government Spending

The growth of real consumption and total investment spending by all levels of government slowed for a second year in 2004, rising by about 2 percent. Most of the slow-down in growth occurred in the spending of state and local governments; by contrast, real federal spending climbed by about 4¾ percent. That growth was buoyed by a strong increase in defense spending (over 7 percent) that reflected supplemental appropriations for activities in Iraq and Afghanistan and for other activities related to

the war on terrorism. Real federal nondefense spending declined slightly in 2004. As in 2003, real spending by state and local governments grew by less than 1 percent.

CBO projects that during the next two years, the growth of real consumption plus investment in the government sector overall will continue to slow, despite a small rise anticipated in spending by states and localities. That slowdown stems from a projected weakening in defense spending, which largely results from the procedures that CBO is required to use to project defense and other discretionary spending (see Chapter 1).

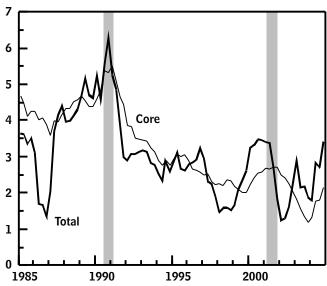
Most analysts expect that spending for Iraq and Afghanistan and for other activities related to the war on terrorism will be greater than the amount CBO has projected under the rules that govern its baseline projections. Consequently, CBO has developed an illustrative alternative for such spending (see Table 1-3 on page 8). The alternative incorporates the assumption that outlays are higher than in the current baseline by \$30 billion in fiscal year 2005, \$70 billion in 2006, and \$75 billion in 2007; thereafter, outlays steadily decline. Additional outlays for the 2005-2015 period total \$620 billion (including \$172 billion in debt service).

If that spending path were incorporated in CBO's baseline, the forecast for real growth of GDP would be slightly faster in the near term but slightly slower, on average, over the 10-year projection horizon. Because roughly two-thirds of those outlays might be spent in the United States rather than abroad, the additional spending would boost economic growth slightly in the short term by adding to the demand for U.S. goods and services. For the next 10 years as a whole, however, the additional defense spending under that alternative path (plus the associated increase in interest payments) would produce larger federal deficits than those projected in the current baseline and would slightly reduce the growth of the economy's potential supply of output by crowding out some private investment. To a certain extent, increased private saving and more borrowing from abroad would offset the effect of those larger deficits. Nevertheless, investment during the 2005-2015 period would be lower than it would otherwise have been, and the resulting fall in national income would be greater, as payments to people in other countries increased to service the additional debt owed to them.

Figure 2-9.

The Consumer Price Index: Total and Core Measures

(Percentage change from previous year)



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Note: The core consumer price index is the consumer price index for all urban consumers excluding food and energy.

Inflation

Special factors last year, such as the surge in oil prices and upturns in the cost of shelter and used cars, caused inflation as measured by the CPI-U to rise sharply, from 1.8 percent during 2003 to 3.4 percent during 2004 (see Figure 2-9). That increase, however, is not necessarily a harbinger of generally higher inflation. During the next two years, CBO forecasts, the growth in prices will be close to 2 percent. Some analysts believe that the long period of accommodative monetary policy, the solid economic growth of the past several quarters, and a falling dollar will drive inflation higher. Yet although CBO in its forecast acknowledges that there is some risk of inflation's being higher than it has assumed, it basically maintains that falling oil prices and an excess of productive capacity, both here and abroad, are likely to keep inflation low during the 2005-2006 period.

Energy and Food Prices. Prices for both energy and food grew rapidly during 2004, but CBO does not expect that price rises in either of those categories will exacerbate inflation in 2005 and 2006. An anticipated reversal in en-

ergy prices is the primary reason that CBO's forecast incorporates an assumption of lower inflation in 2005 than in 2004, a view strongly shared by many analysts. Indeed, CBO expects oil prices to be more than 10 percent lower in the fourth quarter of this year than they were in the fourth quarter of 2004 (see Box 2-2 on page 42). In addition, CBO expects a smaller rise during the next two years in the CPI-U for food and beverages—a category that accounts for 18 percent of the price index. Because of unusual weather and an upturn in beef prices (caused in part by a shift to the consumption of more protein), the food and beverages component of the CPI-U rose by 3.3 percent last year. CBO anticipates that during the forecast period, inflation in food prices will revert to its average of the past 15 years of about 2.5 percent.

Core Inflation. Hikes in energy and food prices were not the only reason for the spurt in growth of the price index in 2004. The core CPI-U—the CPI-U excluding the energy and food categories—grew by 2.2 percent over the course of the year, compared with a rise of 1.1 percent in 2003. Some analysts cite the 2004 increase as evidence of rapidly building inflationary pressures. However, only a small portion of the quickened pace of core inflation in 2004—the increase in import prices—implies a continuing upward push on prices during the next two years.

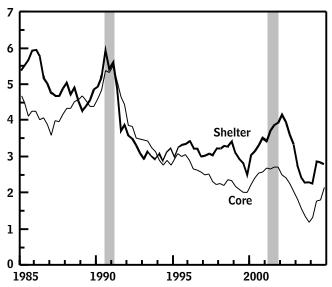
Bolstering CBO's belief that inflation will not surge in the near term is that most of the increase in the core rate in 2004 was simply a rebound from the unusually low rate of growth of prices in 2003. A little less than half of the acceleration in 2004 can be traced to the shelter price index in the CPI-U. That measure, which primarily comprises rental prices and has a total relative importance in the core CPI-U of about 42 percent, grew by 3.1 percent in 2002. During 2003, its rate of growth slumped, registering only 2.2 percent; then in 2004, it climbed again, to 2.7 percent (see Figure 2-10). A significant part of the acceleration in the core CPI-U during 2004, therefore, was caused by the rebound in the growth of prices for shelter. Although CBO forecasts that shelter prices will not accelerate further, that outlook is particularly uncertain, largely because the wide variation in the growth of the shelter price index over the past four years has not yet been satisfactorily explained.

Used car prices also contributed to the increase in inflation in 2004—but only because they were bouncing back from an unusually steep fall (12 percent) in 2003. Last year, the prices of used cars rose moderately, a reversal

Figure 2-10.

The Consumer Price Index: Shelter and Core Measures

(Percentage change from previous year)



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Note: The core consumer price index is the consumer price index for all urban consumers excluding food and energy.

that accounted for a significant part of the increase in core inflation. Nevertheless, that moderate amount of growth in such prices is more likely to prevail over the

two-year forecast period than is another jump to higher inflation.

Excess Capacity Versus the Risks of Higher Inflation. The outlook for overall inflation during the next two years is favorable because excess productive capacity apparently exists both in the United States and abroad. Therefore, the long span of the Federal Reserve's accommodative monetary policy and the recent years of solid economic growth are not likely to push up inflation precipitately in the near term. In that environment, price shocks in the commodities markets (such as last year's surge in oil prices) may boost the overall price level, but they are unlikely to lead to sustained inflation. The drop in the dollar, together with the resulting hikes in the prices of imported goods and services, appears to be the single biggest risk for higher inflation.

At the end of 2004, the economy still had a considerable amount of excess capacity, largely because productivity

growth had been so strong during the 2002-2004 period. CBO's estimate of potential GDP was about 1¼ percent higher than actual GDP at the end of 2004; annual growth of potential output in the near term is forecast to be about 3¼ percent. Thus, it appears that the economy could grow by about 4 percent annually for two years before some sectors would start to experience strains in their productive capacity. Indeed, in CBO's forecast, real GDP does not fully merge with potential GDP until the end of 2007.

Of course, the economy may have more or less excess capacity than CBO has forecast. Its current estimates, for example, indicate slightly more slack at the end of 2004 than was suggested in its update, in September 2004, of last January's *Budget and Economic Outlook*. However, those measures are subject to considerable uncertainty. Developing estimates of trends in the growth of productivity and labor force participation has been particularly difficult in recent years. Nevertheless, other indicators of capacity, such as measures of the manufacturing sector's capacity utilization, the percentage of the adult population who are employed, and the pace of core price inflation, support the view that the economy currently has a significant amount of slack.

The rise that is occurring in import prices as a result of the fall of the dollar is causing some inflationary pressure, but again, CBO expects that the excess supply in the economy will keep overall inflation mild throughout the two-year forecast period. The growth of import prices has mirrored the ups and downs in the value of the dollar. For example, during the 1995-2001 period, when the dollar was generally rising, the prices of imports fell. By contrast, since early 2002 and the beginning of the dollar's fall, import prices have been rising. CBO anticipates that the dollar will fall further, causing import prices to continue to rise for several years. However, in CBO's estimation, the growth of prices for imported non-oil goods is likely to be contained during 2005 and 2006 and should not result in higher inflation.

The Economic Outlook Through 2015

CBO projects that real GDP will grow at an average annual rate of 2.9 percent during the 2007-2015 period, or slightly faster than potential GDP during the same span. Growth of real GDP, though fast during 2005 and 2006, is not expected to fully close the gap between real and

Box 2-2.

Is the Price of Oil Going to Fall?

The price of high-quality oil in the U.S. spot market (the market dealing in oil for immediate delivery) stood at \$43 per barrel in December 2004. At the same time, prices in the futures market for oil (for delivery in later months) were somewhat lower about \$40 for delivery in December 2006, for example (see the figure below). That disparity seems to suggest that the futures market expects the spot price of oil to fall. Partly on the basis of the downwardtrending path suggested by prices in the New York Mercantile Exchange's (NYMEX's) oil-futures market, the Congressional Budget Office (CBO) has assumed for the purposes of its economic forecast that, through 2009, oil prices will fall from their current peak levels. Thereafter, prices are projected to rise through 2015 at the same rate as overall inflation.

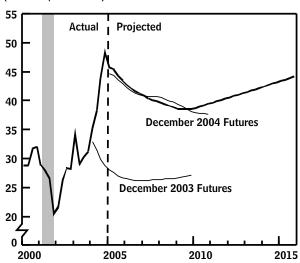
Utilizing prices in the futures market raises questions about whether such indicators are a reliable guide to longer-term spot prices. Futures prices are often below spot prices—including, for instance, the period in early 2004 when spot prices were rising from less than \$35 per barrel to more than \$50. Yet users of futures-market forecasts know that such predictions, though unlikely to precisely delineate the path that spot prices will eventually follow, may nevertheless be among the best methods available to predict the future price of oil.

For example, the Bank of England's monetary policy committee, in its quarterly *Inflation Report* of November 2000, noted that it "has maintained the assumption that the futures market provides the best guide to the outlook for the oil price" (p. 50). The Federal Reserve Board has also used information on prices in futures markets to gauge inflationary pressures. Participation in the oil futures market is quite

extensive: in late 2004, for example, contracts for future delivery of oil amounted to more than 700 million barrels at NYMEX. (That figure rises to more than 1 billion barrels, if contracts at the London International Petroleum Exchange are included.) By comparison, world production of oil through most of 2004 averaged just over 72 million barrels per day, implying that current futures contracts cover almost 15 days of production.

Price of Oil

(Dollars per barrel)



Sources: Congressional Budget Office; New York Mercantile Exchange; *Wall Street Journal.*

For a recent example, see the remarks of Ben Bernanke, Governor of the Federal Reserve Board, on "Oil and the Economy," Distinguished Lecture Series, Darton College, Albany, Georgia, October 21, 2004, available at www. federalreserve.gov/boarddocs/speeches/2004/20041021/ default.htm.

Box 2-2.

Continued

Although projections based on futures-market prices are subject to large errors, they do not appear to have a significant bias. Oil prices in the futures market reflect the consensus of the market's participants about the evolution of future demand and supplies—but that consensus can certainly be wrong. For example, futures-market predictions of the price of oil for delivery in December 2004 ranged from as low as \$16 per barrel (in March 1999) to as high as \$56 (in late October 2004). Presumably, the variation in December delivery prices during that period reflected emerging changes in actual and predicted demand as well as supplies that had not previously been taken into account.

Forecasters might be concerned about a bias in the futures market if, for example, participants whose beliefs underlay the consensus futures price were more affected by the potential for losses than by the prospect of gains. Aversion to the risk of losses could distort the course of oil prices as projected by the market. Available research into such a distortion has not uncovered strong evidence of it. For example, calculations by Federal Reserve Board economists indicate that average forecasting errors from a comparison of 12-month futures prices with subsequent spot prices from April 1989 to December 2003 were insignificant.²

Several possible contributing factors have been suggested to explain why futures-market prices indicate a drop from current levels in the spot market. For example, currently tight market conditions may be cre-

Another likely reason for the drop in oil prices indicated by the futures market is heightened uncertainty about longer-term market conditions and prices. With the possibility that prices might be substantially higher in the future, some producers may have been induced to curtail current production by the prospect of bigger profits down the road—a plan that, if followed, would push up spot prices. Such producers, of course, would also run the risk of encountering unusually low prices in the future and earning lower-than-expected profits, but they would have the option of limiting production then as well and waiting for more profitable conditions to emerge. The existence of that option implies that current prices may have to be higher than prices in futures markets to induce producers to sell now instead of later, and current prices may have to be higher still in the presence of heightened uncertainty about the future.³

ating temporary bottlenecks, which market participants expect will be gradually resolved. Recent indications of such constrictions include strong growth in world demand amid low levels of inventories; threatened or actual disruptions in supplies from some countries (such as Nigeria, Venezuela, and Russia); production by other major suppliers (such as Saudi Arabia) that may be near short-term capacity; and world oil transport systems that are also temporarily operating at almost their full potential. (A report in London's *Financial Times* of November 3, 2004, cited a "20-fold rise in tanker rates in the last two years.")

See Sergey V. Chernenko, Krista B. Schwarz, and Jonathan H. Wright, The Information Content of Forward and Futures Prices: Market Expectations and the Price of Risk, International Finance Discussion Paper No. 808 (Board of Governors of the Federal Reserve System, June 2004).

The option effect on the relation between spot and futures prices is discussed in Robert Litzenberger and Nir Rabinowitz, "Backwardation in Oil Futures Markets: Theory and Empirical Evidence," *Journal of Finance*, vol. 50, no. 5 (December, 1995), pp. 1517-1545.

potential GDP by the end of 2006. As a result, real GDP is projected to grow nearly two-tenths of a percentage point faster than potential GDP in 2007 and 2008 but then to rise at the same rate thereafter. From 2007 through 2015, in CBO's view, CPI-U inflation will average 2.2 percent and the unemployment rate, 5.2 percent. The rate on three-month Treasury bills is estimated to average 4.6 percent over the medium term, and the rate on 10-year Treasury notes, 5.5 percent.

To develop its medium-term projections for 2007 through 2015, CBO projects levels and rates for the factors that underlie potential GDP, such as growth of the labor force, capital services (the productive services provided by the economy's capital stock), and productivity. In so doing, CBO takes into account the effect that current fiscal policy may have on those variables, but it does not attempt to forecast business-cycle fluctuations beyond the next two years.

Potential Output

CBO's projection of potential output during the 2005-2015 period shows output growing at an average annual rate of 2.9 percent, or about six-tenths of a percentage point slower than its long-run average pace of 3.5 percent (see Table 2-2). That slower projected growth is almost entirely due to a dramatic slowdown expected in the rate of expansion of the potential labor force, as the large cohort of workers born during the postwar baby boom begins to reach the traditional age for retirement. By contrast, capital accumulation and productivity growth are projected to grow at rates that approximate their long-run averages. Although in CBO's estimation, potential GDP will grow more slowly than its historical average, its estimated rate of growth will still be about a tenth of a percentage point faster than the rate CBO projected in September 2004. CBO's new, higher projection stems from its expectation of slightly faster growth of total factor productivity and from an upward revision in its projection of the growth of capital services.

The Potential Labor Force. CBO's projection of growth in the potential labor force between 2005 and 2015 (0.8 percent, on average—the same rate that CBO forecast last September) is slower than its historical rate of growth of 1.6 percent during the 1950-2003 period. The slower projected pace stems from CBO's expectation that labor force participation will decline sharply during the next 10 years. That decline occurs largely because the leading edge of the baby-boom generation reaches the traditional retirement age, but it is also spurred by other factors: the

rate of men's labor force participation is likely to continue its historical downward trend; women are not expected to increase their rate of participation as much as they did in the past; and the tax cuts in the Economic Growth and Tax Relief Reconciliation Act of 2001 and JGTRRA are scheduled to expire in 2011, which will raise the marginal tax rate on labor (the rate on the last dollar of income) and lessen the incentive to work. The slowdown in the growth of the potential labor force is reflected in CBO's estimate of potential hours worked—that factor is projected to grow at an annual average rate of 0.9 percent during the period (a growth rate similar to that reported last September in CBO's update of its January 2004 outlook).

Capital Services. Capital services during the 2005-2015 period are now expected to grow by 4.2 percent per year, on average, or about 0.5 percentage points faster than CBO envisioned last September. That revision did not result from a new projection for investment spending—the share of potential GDP that such spending makes up is about the same in CBO's current outlook (12 percent, on average) as it was in last September's. Instead, the revised outlook for capital accumulation results from the combination of revisions to data on the capital stock by the Bureau of Economic Analysis (including data for 2003) and a revised weighting scheme for different types of capital. Those changes led to estimates of a faster pace of growth in capital services during recent years and in the 10-year projection period.

Total Factor and Labor Productivity. Over the next 10 years, total factor productivity is likely to rise at an average annual rate of 1.4 percent, in CBO's estimation—which is roughly equal to the average rate of growth of potential TFP during the 1950-2004 period and almost identical to the rate that CBO projected last September. Since September, however, CBO has changed its method for calculating and projecting potential TFP in response to changes in the data underlying that estimate (see Box 2-1 on page 29). A series of revisions in recent years has reduced the estimated rate of growth of TFP during the 1990-1999 period. As a result, a special adjustment to the TFP estimate—associated with improvements in computer quality—is no longer necessary, and CBO has discontinued it. ¹⁰ That change raised the growth of poten-

^{10.} CBO provides more information about its method on its Web site (www.cbo.gov); see "CBO's Revised Method for Estimating and Projecting Potential TFP."

Table 2-2.

Key Assumptions in CBO's Projection of Potential Output

(By calendar year, in percent)

	Average Annual Growth				Projected Average Annual Growth				
	1950- 1973	1974- 1981	1982- 1990	1991- 1995	1996- 2004	Total, 1950- 2004	2005- 2010	2011- 2015	Total, 2005- 2015
	Overall Economy								
Potential Output	3.9	3.3	3.0	2.7	3.4	3.5	3.2	2.7	2.9
Potential Labor Force	1.6	2.5	1.6	1.2	1.2	1.6	1.1	0.6	0.8
Potential Labor Force Productivity ^a	2.3	0.8	1.4	1.5	2.2	1.8	2.1	2.1	2.1
				Nonfarn	n Busines	s Sector			
Potential Output	4.0	3.6	3.1	3.1	3.9	3.7	3.5	3.0	3.3
Potential Hours Worked	1.4	2.4	1.4	1.4	1.4	1.5	1.2	0.6	0.9
Capital Input	3.8	4.2	3.9	2.7	4.6	3.9	4.5	3.7	4.2
Potential Total Factor Productivity	1.9	0.7	0.9	1.3	1.6	1.4	1.4	1.4	1.4
Potential TFP excluding adjustments	1.9	0.7	1.0	1.3	1.3	1.4	1.3	1.3	1.3
TFP adjustments	0	0	0	*	0.3	*	0.1	0.1	0.1
Price measurement ^b	0	0	0	*	0.1	*	0.1	0.1	0.1
Temporary adjustment ^c	0	0	0	0	0.2	*	0	0	0
Contributions to Growth of Potential Output (Percentage points)									
Potential hours worked	1.0	1.7	1.0	1.0	0.9	1.1	0.8	0.4	0.6
Capital input	1.1	1.3	1.2	0.8	1.4	1.2	1.4	1.1	1.2
Potential TFP	1.9	0.7	0.9	1.3	1.6	1.4	1.4	1.4	1.4
Total Contributions	4.0	3.7	3.1	3.0	3.9	3.7	3.6	2.9	3.3
Memorandum:									
Potential Labor Productivity ^d	2.6	1.2	1.7	1.7	2.5	2.2	2.4	2.3	2.4

Source: Congressional Budget Office.

Note: * = between zero and 0.05.

a. The ratio of potential GDP to the potential labor force.

- b. An adjustment for a conceptual change in the official measure of the GDP price index.
- An adjustment for the unusually rapid growth between 2001 and 2003.
- d. The estimated trend in the ratio of output to hours worked in the nonfarm business sector.

tial TFP very slightly (by a few hundredths of a percentage point) during the period since 1990.

Inflation, Unemployment, and Interest Rates

Between 2006 and 2015, inflation as measured by the CPI-U is expected to average 2.2 percent, and the GDP price index is projected to grow at an average annual rate of 1.8 percent. Both rates are identical to those projected in September 2004. In general, CBO assumes that the Federal Reserve's monetary policy will result in an under-

lying rate of CPI-U inflation that averages between 2 percent and 2.5 percent. ¹¹ The unemployment rate during the period, in CBO's view, will average 5.2 percent—

^{11.} The Federal Reserve's preferred measure of core inflation is the price index for personal consumption expenditures (PCE) excluding food and energy prices. Growth of the core PCE price index over the 10-year projection period is likely to be about a quarter of a percentage point slower, on average, than the growth of the core CPI-U.

which is identical to CBO's estimate of the nonaccelerating inflation rate of unemployment, or NAIRU.¹²

CBO's medium-term projections of interest rates (which it estimates by adding its projection for inflation to its projection for real interest rates) have not altered since last September. Using the CPI-U as a measure of price changes, CBO estimates that the real rate on three-month Treasury bills will average 2.4 percent during the 2007-2015 period and that the real rate on 10-year Treasury notes will average 3.3 percent. Combined with the projected rates of CPI-U inflation, those real rates imply nominal rates over the medium term of 4.6 percent for three-month Treasury bills and 5.5 percent for 10-year Treasury notes.

Taxable Income

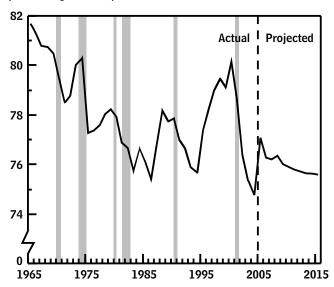
Forecasts of the growth of specific categories of income (such as wages and salaries, corporate profits, and proprietors' income) drive projections of revenues. ¹³ In CBO's two-year forecast, the share of GDP reflecting income categories that affect revenue projections bounces up in 2005, falls back in 2006, and drifts downward thereafter (see Figure 2-11). The rise in 2005 stems largely from the expiration of tax provisions that have allowed firms to deduct from their profits a larger-than-usual percentage of their expenditures on equipment and structures. Once those provisions expire, profits subject to tax are expected to rise in 2005 relative to 2004.

The drop in the share of taxable income that CBO projects for 2006 stems from its expectation that, under current law, firms will have to make larger-than-usual contributions to defined-benefit pension plans that year (see Appendix D). Those contributions are not considered part of a firm's taxable income; as a result, the profits share of GDP is likely to be smaller than it would otherwise be. The reduction in profits accounts for the bulk of the drop in the taxable income share forecast for 2006.

Figure 2-11.

Total Share of GDP for Income Categories That Affect Revenue Projections

(Percentage of GDP)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Note: Income categories include the following, measured on a national income and product accounts basis: wages and salaries, book profits, proprietors' income, rental income, personal dividend income, and personal interest income.

Broadly speaking, GDP can be divided into a share that goes to labor and a share that goes to capital. Labor's share is the sum of the following categories: wages and salaries; payments made by employers on behalf of workers (such as the employer's share of health insurance premiums and contributions to pension funds, as well as payments for Social Security and Medicare); and about 70 percent of the income of proprietors. ¹⁴ The rest of GDP is capital's share. Although the shares of labor and capital have varied over the postwar period, labor's share has averaged 62.7 percent of GDP and capital's, 37.3 percent.

Wages and salaries, the category of income that is most important for revenue projections, is forecast to rise from an estimated 45.6 percent of GDP in 2004 to 45.8 per-

^{12.} The NAIRU is the unemployment rate consistent with a constant rate of inflation. An unemployment rate higher than the NAIRU indicates downward pressure on inflation, whereas an unemployment rate lower than the NAIRU indicates upward pressure on inflation. Estimates of the NAIRU are based on the historical relationship between inflation and the unemployment rate.

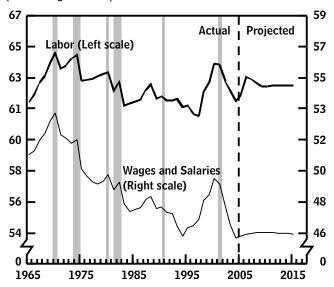
^{13.} Proprietors' income is the income of self-employed workers.

^{14.} Exactly how much of the income earned by proprietors is a return to capital (the equipment and structures that self-employed workers use) and how much is a return to labor is unclear. However, 70 percent of total proprietors' income is generally assumed to be the return to labor.

Figure 2-12.

Labor Income and Wages and Salaries

(Percentage of GDP)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

cent in 2006; it is then expected to average 45.9 percent during the remainder of the 10-year projection period. Since the mid-1960s, that share has shrunk (see Figure 2-12); however, labor's overall share of output has not declined, and CBO projects that it will remain high for a few years, bolstered by firms' higher-than-usual contributions to their defined-benefit plans. Later, CBO expects, labor's share of GDP will remain close to its postwar average of 62.7 percent. ¹⁵

The difference since 1980 between the trends in labor's share of total income and in the share of wages and salaries has arisen primarily because of the increase in the shares of GDP claimed by health benefits, pensions, and proprietors' income. CBO estimates that over the next 10 years, the share of income claimed by proprietors will level off, the share attributable to health benefits will steadily increase, and the portion of income that represents pension payments will initially rise sharply and then fall. On balance, the overall share of GDP that those categories constitute does not increase over the 10-year pe-

riod, so the share of labor's income that is attributable to wages and salaries does not trend downward.

Uncertainty about the path of the shares of income that affect revenue projections has been a source of error in CBO's budget projections in the past and is a major risk to the accuracy of the current forecast. Even though CBO's annual estimates of nominal GDP during the late 1990s were quite accurate, CBO consistently understated the increase in revenues occurring during that period because it failed to anticipate growth in some of the categories of income—in particular, an extraordinary increase in the share of wages and salaries—that are important in estimating revenues. (The wages and salaries share jumped in part because of stock options that were exercised during the late-1990s boom in the stock market.) Conversely, CBO underestimated the speed of the drop in that share during the early 2000s, which led to budget projections that were too optimistic. The variability in income shares during the 1995-2002 period was extremely unusual, but it is certainly possible that such shares will be significantly greater or smaller over the next 10 years than CBO is currently projecting.

Changes in CBO's Outlook Since September 2004

CBO's current view of the economy is broadly similar to its outlook in September 2004, though with some notable differences (see Table 2-3). The growth of real GDP in CBO's current estimates is slightly slower for 2004 and 2005, reflecting, in part, slightly higher prices for oil and lower assumed government spending for defense. For 2006 and thereafter, the growth of real GDP is faster, reflecting a brighter outlook for growth of potential GDP in the medium term than CBO had projected in September. Revisions to the outlook for the unemployment rate mirror those to the forecast of GDP growth: for 2006, the rate is slightly higher than last September's but then, for the medium term, falls back to 5.2 percent—CBO's estimate of the NAIRU.

In CBO's current estimates, inflation as measured by the CPI-U grows at about the same rate in 2005 and 2006 as it did in CBO's September forecast. The year-over-year growth rate for 2005 of 2.4 percent, as reported in Table 2-3, contains some residual effect of the spike in energy prices that actually occurred in 2004. For 2005, the CPI-U is forecast to grow by 1.9 percent (measured on a fourth-quarter-over-fourth-quarter basis); for the

^{15.} CBO assumes that most of those contributions come from profits and not from any form of labor compensation.

Table 2-3.

CBO's Current and Previous Economic Projections for Calendar Years 2004 to 2014

	Estimated	Forecast		Projected Annual Average		
	2004	2005	2006	2007 to 2010 ^a	2011 to 2014 ^b	
Nominal GDP (Billions of dollars)						
January 2005	11,730	12,396	13,059	15,940	19,031	
September 2004	11,753	12,464	13,058	15,697	18,628	
Nominal GDP (Percentage change)						
January 2005	6.6	5.7	5.3	5.1	4.5	
September 2004	6.8	6.1	4.8	4.7	4.4	
Real GDP (Percentage change)						
January 2005	4.4	3.8	3.7	3.3	2.7	
September 2004	4.5	4.1	3.2	2.9	2.6	
GDP Price Index (Percentage change)						
January 2005	2.1	1.8	1.5	1.8	1.8	
September 2004	2.2	1.8	1.5	1.7	1.8	
Consumer Price Index ^c (Percentage change)						
January 2005	2.7	2.4	1.9	2.2	2.2	
September 2004	2.6	2.0	2.0	2.2	2.2	
Jnemployment Rate (Percent)						
January 2005	5.5	5.2	5.2	5.2	5.2	
September 2004	5.6	5.2	5.1	5.2	5.2	
Three-Month Treasury Bill Rate (Percent)						
January 2005	1.4	2.8	4.0	4.6	4.6	
September 2004	1.3	2.6	4.0	4.6	4.6	
en-Year Treasury Note Rate (Percent)						
January 2005	4.3	4.8	5.4	5.5	5.5	
September 2004	4.6	5.4	5.5	5.5	5.5	
ax Bases (Billions of dollars)						
Corporate book profits						
January 2005	984	1,331	1,222	1,349	1,566	
September 2004	1,045	1,455	1,430	1,447	1,710	
Wages and salaries	1,010	1,100	1, 150	±, 1 17	1,7 10	
January 2005	5,346	5,665	5,979	7,317	8,721	
September 2004	5,370	5,703	6,003	7,238	8,592	
Tax Bases (Percentage of GDP)	3,370	3,703	0,003	7,230	0,392	
Corporate book profits						
	8.4	10.7	9.4	8.7	8.3	
January 2005	8.9	10.7	11.0	9.6	9.1	
September 2004	6.9	11./	11.0	9.0	9.1	
Wages and salaries	45.7	45.7	4F 0	45.0	45.0	
January 2005	45.6	45.7	45.8	45.9	45.9	
September 2004	45.7	45.8	46.0	46.1	46.1	
Memorandum:						
Real Potential GDP (Percentage change)						
January 2005	3.2	3.2	3.3	3.1	2.7	
September 2004	3.1	3.1	3.2	2.9	2.6	

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

Note: Percentage changes are year over year.

- a. For projections in billions of dollars, the level is that in 2010.
- b. For projections in billions of dollars, the level is that in 2014.
- c. The consumer price index for all urban consumers.

medium term, growth is expected to average 2.2 percent, the same rate that CBO projected last September. Changes to CBO's view of the GDP price index since last fall are modest, with slightly faster growth anticipated in the near term and little change in the medium term. CBO's outlook for short-term and long-term interest rates in the medium term has remained virtually unchanged since September. However, CBO now anticipates that for 2005 and 2006, short-term interest rates will be slightly higher than it envisioned in September, and long-term rates will be lower.

A Comparison of Forecasts

Comparing the estimates of CBO, the Administration, and a consensus of private-sector forecasters reveals some differences, but in general, the three outlooks are similar (see Table 2-4). CBO's forecast for inflation during the next two years is lower, and its estimate of real GDP growth slightly higher, than those of the Administration and the *Blue Chip* consensus forecast. (The *Blue Chip* forecast is an average of the estimates of about 50 private-

sector forecasters.) Otherwise, CBO's outlook for the two-year horizon is similar to both the *Blue Chip*'s and the Administration's. CBO's estimates of the unemployment rate, nominal GDP growth, and interest rates differ little from those of the other forecasts, reflecting the widespread view that growth over the next two years will be higher than its historical trend rate, interest rates will rise slightly, and the unemployment rate will ease slowly downward.

CBO's forecast for real GDP growth over the longer term is the same as that of the Administration. For the 2007-2010 period (the Administration's forecast does not extend beyond 2010), both agencies foresee real GDP growth averaging 3.2 percent, and there is little difference between their estimates of the unemployment rate and the long-term interest rate. CBO envisions lower inflation, however—notably for the GDP price index—and higher short-term interest rates. Therefore, real short-term interest rates are significantly higher in CBO's forecast than in the Administration's.

Table 2-4.

Comparison of CBO, *Blue Chip*, and Administration Forecasts for 2004 to 2010

	Estimated	Fore	ecast	Projected Annual Average,			
	2004	2005	2006	2007 to 2010			
	Fourt	Fourth Quarter to Fourth Quarter (Percentage Change)					
Nominal GDP							
Blue Chip consensus	6.3	5.5	5.3	n.a.			
CB0	6.3	5.5	5.4	5.0			
Administration	6.3	5.5	5.6	5.3			
Real GDP							
Blue Chip consensus	3.9	3.5	3.3	n.a.			
CBO	3.9	3.7	3.8	3.2			
Administration	3.9	3.5	3.4	3.2			
GDP Price Index							
Blue Chip consensus	2.4	1.9	2.0	n.a.			
СВО	2.2	1.7	1.5	1.8			
Administration	2.3	1.9	2.0	2.1			
Consumer Price Index ^a							
Blue Chip consensus	3.4	2.3	2.4	n.a.			
СВО	3.4	1.9	2.0	2.2			
Administration	3.4	2.0	2.3	2.4			
	Calendar Year Average						
Unemployment Rate (Percent)				-			
Blue Chip consensus	5.5	5.3	5.2	n.a.			
CBO	5.5	5.2	5.2	5.2			
Administration	5.5	5.4	5.2	5.1			
Three-Month Treasury Bill Rate							
(Percent)							
Blue Chip consensus	1.4	3.0	3.8	n.a.			
CBO	1.4	2.8	4.0	4.6			
Administration	1.4	2.7	3.5	4.1			
Ten-Year Treasury Note Rate (Percent)							
Blue Chip consensus	4.3	4.7	5.3	n.a.			
СВО	4.3	4.8	5.4	5.5			
Administration	4.3	4.6	5.2	5.5			

Source: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board; Aspen Publishers, Inc., Blue Chip Economic Indicators (January 10, 2005); Council of Economic Advisers, Department of the Treasury, and Office of Management and Budget, "Administration Economic Forecast" (joint press release, December 17, 2004).

a. The consumer price index for all urban consumers.